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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,447	03/31/2004	Zhiwei Dong	SIL.0005US	5462
21906	7590	09/08/2005	EXAMINER	
TROP PRUNER & HU, PC 8554 KATY FREEWAY SUITE 100 HOUSTON, TX 77024			GLENN, KIMBERLY E	
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/814,447	DONG, ZHIWEI	
	Examiner	Art Unit	
	Kimberly E. Glenn	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-36 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 14-31 is/are allowed.
- 6) Claim(s) 1,2,6,7,11 and 32 is/are rejected.
- 7) Claim(s) 3-5,8-10 and 33-36 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/12/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION***Claim Rejections - 35 USC § 102***

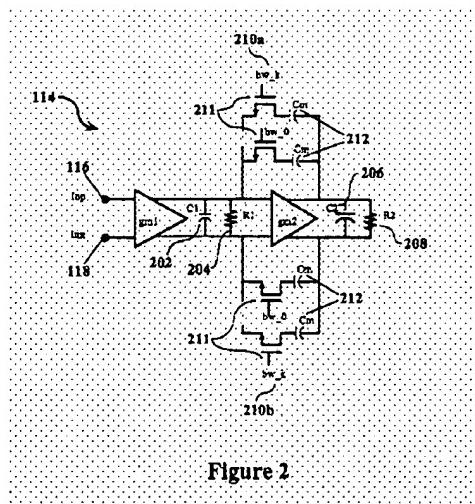
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

((a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 2, 6, 7, and 11 are rejected under 35 U.S.C. 102(a) as being anticipated by Mehr US Patent 6,545,534.

Mehr disclose in figure 2 an amplifier having inputs In_p and In_n . The bandwidth of the amplifier is inherently defined by the cut-off frequency. A reactive component (capacitor C_m) is coupled to the outputs. The amplifier further comprises of compensation resistors 211. The compensation network, which comprises of resistor 211 and capacitor 212 adjust the bandwidth of the amplifier. (Column 3; lines 54 through column 4; line 34)



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spencer US patent 6,823,292 in view of Mehr US Patent 6,545,534.

Spencer discloses in figure 1 a transceiver comprising a low noise amplifier 20, a mixer 22, a demodulator 32, and a filter 30.

Thus, Spencer disclose all the limitation of the claims with the exception of the filter comprising an active device providing an input port and an output port, the active device having a bandwidth defined by a cutoff frequency; a reactive component coupled to the output port; and a compensation resistance coupled to the reactive component, wherein the compensation resistance is effective to compensate for a bandwidth limitation of the active device.

Mehr disclose in figure 2 an amplifier having inputs In_p and In_n . The bandwidth of the amplifier is inherently defined by the cut-off frequency. A reactive component (capacitor C_m) is coupled to the outputs. The amplifier further comprises of compensation resistors 211. The compensation network, which comprises of resistor 211 and capacitor 212 adjust the bandwidth of the amplifier. The amplifier has a one pole-filtering characteristic.

Therefore, one of ordinary skill in the art would have found it obvious to replace the general filter of Spencer with the amplifier having the one pole filtering characteristic as taught by Mehr. The motivation for this modification would have been to provide a filtering means that provides a one pole filtering characteristic, which is adjustable so as to remain constant for a change in gain.

Allowable Subject Matter

Claims 14-31 are allowed.

Claims 3-5, 8-10, 12, 13 and 33-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: With regards to claims 3-5, 11 and 12, the prior art of record does not disclose or fairly teach the compensation resistor having a resistance values that is inversely proportional to the capacitance of the capacitor. With regards to claims 8-12, the prior art of record does not disclose or fairly teach the compensation resistor having a resistance value that is inversely proportional to a tangent of the phase shift at the predetermined compensation frequency. With regards to claims 14-22, the prior art of record does not disclose or fairly teach determining the value of an effective negative resistance that results from the bandwidth limitation of the active device and providing a compensation resistor to compensate for the negative resistance. With regards to claims 23-30, the prior art of record does not disclose or fairly teach a first and second compensative

reactive branch wherein the first branch is coupled between the input node and the intermediate node and the second branch is coupled between the output node and the intermediate node.

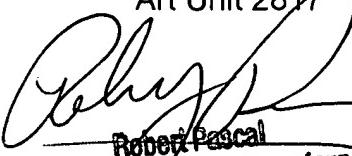
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E. Glenn whose telephone number is (571)-272-1761. The examiner can normally be reached on Monday-Friday 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

keg

Kimberly E Glenn
Examiner
Art Unit 2817


Robert Pascal
Supervisory Patent Examiner
Technology Center 2800